

## **Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals**

**Sub-Committee of Experts on the Transport of Dangerous Goods**

**15 November 2011**

### **Fortieth session**

Geneva, 28 November – 7 December 2011

Item 8 of the provisional agenda

**Global harmonization of transport of dangerous goods regulations with the Model Regulations**

## **Harmonization of the IMDG Code with the 17<sup>th</sup> revised edition of the United Nations Recommendations on the Transport of Dangerous Goods, Model Regulations**

### **Note by the secretariat**

- 1 The Editorial and Technical Group (E and T Group) of the IMO Sub-Committee on Dangerous Goods, Solid Cargoes and Containers met from 26–28 September 2011 under the chairmanship of Mrs. Olga Lefèvre Pestel (France).
2. When considering harmonization of the IMDG Code with the 17<sup>th</sup> revised edition of the UN Recommendations on the Transport of Dangerous Goods, the E and T Group noted a number of issues that should be referred to the UN Sub-Committee.
3. After consultation of the IMO secretariat, the secretariat reproduces hereafter relevant paragraphs of the report of the E and T Group circulated by IMO under the symbol DSC 17/3.

\* \* \* \* \*

## 1 General

### Introduction

1.1 The Editorial and Technical (E&T) Group of the Sub-Committee on Dangerous Goods, Solid Cargoes and Containers held its sixteenth session (E&T 16) from 26 to 30 September 2011 under the chairmanship of Mrs. Olga P. LEFEVRE (France).

1.2 The group was attended by delegations from the following Member Governments:

ARGENTINA	JAPAN
BAHAMAS	NETHERLANDS
BELGIUM	NORWAY
BRAZIL	REPUBLIC OF KOREA
CHINA	SPAIN
DENMARK	SWEDEN
FRANCE	UNITED KINGDOM
GERMANY	UNITED STATES

1.3 The meeting was also attended by observers from the following non-governmental organizations in consultative status:

EUROPEAN CHEMICAL INDUSTRY COUNCIL (CEFIC)  
DANGEROUS GOODS ADVISORY COUNCIL (DGAC)  
INTERNATIONAL VESSEL OPERATORS DANGEROUS GOODS ASSOCIATION (IVODGA)

...

## 2 Finalization of the draft note verbale (errata and corrigenda) to the IMDG Code amendment 35-10

2.1 The group considered the proposal by UNECE (DSC 16/3/16) on comments on the report of the fifteenth session of the group, and agreed to include in the annex to the draft note verbale the modification to column (7a) for UN 2590 regarding the transport of this UN No when packed in limited quantities.

2.2 The group also considered other corrections to the 17th revised edition of the Recommendations on the transport of dangerous goods as provided in the annex of DSC 16/3/16 and agreed not to include those in the draft note verbale but to take them into account when finalizing modifications to the draft amendment 36-12 of the IMDG Code.

2.3 The group, based on the relevant decisions of DSC 16 (DSC 16/15, paragraph 3.6), finalized the draft note verbale for the English version to the IMDG Code amendment 35-10, as set out in annex 3, and recalled the request of the Sub-Committee that the Secretariat should issue it before 1 January 2012, the date from which the said amendment would attain mandatory status.

### Draft notes verbales (errata and corrigenda) to the French and Spanish versions of the IMDG Code amendment 35-10

2.4 The group noted that the Chairman, in consultation with interested parties, had finalized the draft notes verbales applicable to the French and Spanish versions of the

IMDG Code amendment 35-10, as set out in annexes 4 and 5 respectively, and noted that the Secretariat should also issue these before 1 January 2012, the date from which the said amendment would attain mandatory status.

### **3 Finalization of THE Draft Amendments to the IMDG Code Amendment 36-12**

3.1 The group considered draft amendment 36-12 to the IMDG Code (DSC 16/3/1, annex 1), as prepared by the Secretariat, incorporating the draft amendments and errata and corrigenda prepared by the group, at its fifteenth session (April 2011), on the basis of amendments to the Recommendations on the transport of dangerous goods, as adopted by the UN Committee of Experts on the transport of dangerous goods and the globally harmonized system of classification and labelling of chemicals (UNCOE) in December 2010, and in light of the submissions to DSC 15. The group finalized draft modifications to the draft amendment 36-12 to the IMDG Code, as set out in annex 6, on the basis of the submissions to DSC 16 and decisions taken thereon. The group requested the Secretariat to prepare a consolidated text of the draft amendment 36-12 of the IMDG Code for circulation and for consideration by MSC 90 with a view to adoption.

3.2 When preparing the modifications to the draft amendment 36-12, the group took into consideration the document of UNECE (DSC 16/3/16) and agreed to insert the proposed corrections and modifications in draft amendment 36-12. Furthermore, the group was of the view that certain issues identified by the group should be brought to the attention of the TDG Sub-Committee for appropriate consideration and requested the Secretariat to take appropriate action. These issues are identified in the paragraphs set out below.

3.3 Regarding the published versions of the IMDG Code, the group also requested the Secretariat to highlight all the modifications introduced in the new text of the IMDG Code with the appropriate symbols, as was done previously for amendment 35-10.

#### **Transport of dangerous goods used as a coolant or conditioner**

3.4 The group was of the view that a coolant or conditioner stored in pressure receptacles and used during transport to maintain product integrity in cargo transport units shall be considered as ship's store or equipment and is, therefore, according to the note in 1.1.1.7 of the IMDG Code, not subject to the provisions of the IMDG Code.

#### **Use of salvage packagings**

3.5 As instructed by the Sub-Committee, the group considered the proposal by the United Kingdom (DSC 16/3/2) regarding the use of salvage packaging and agreed to delete 4.1.1.18.3 and 4.1.1.18.4 in the draft amendment 36-12.

#### **Use of packagings**

##### **General provisions**

3.6 The group agreed that the reference in 4.1.1.9 of the IMDG Code to 6.3.2 was not correct, and agreed to replace 6.3.2 with 6.3.5, which is the appropriate paragraph related to the test provisions for class 6.2 (category A) packagings. The group invited the TDG Sub-Committee to consider amending 4.1.1.9 of the Recommendations on the transport of dangerous goods accordingly.

**PP85**

3.7 As instructed by the Sub-Committee, the group considered the issues related to the assignment of PP85 in amendment 36-12 of the Code, as mentioned in its report of its fifteenth session (DSC 16/3, paragraph 3.24), and further noted, as for PP40, that there is a need for consistency in the assignment of special packing provisions between the different modal regulations, or, alternatively, for assignment of specific modal packing provisions and that proposals might be submitted to this effect to the Sub-Committee of Experts on the Transport of Dangerous Goods (TDG Sub-Committee).

**Inconsistencies in packing instructions**

3.8 The group also noted a number of inconsistencies in packing instructions. For example, metal boxes are not allowed as outer packagings in P115 whereas metal drums are. Headings of the columns for outer packagings in the LP packing instructions are different. In P804, (3), drums in metal other than steel are not allowed. Noting that further work is needed to correct those inconsistencies, the group invited interested delegations to make appropriate proposals for consideration by the TDG Sub-Committee.

**P200**

3.9 When considering P200, the group observed that in the current IMDG Code there was a note assigned to the test pressure columns in tables 2 and 3 of P200 indicating that "where the entries are blank, the maximum working pressure shall not exceed two thirds of the test pressure". Whereas, in the Recommendations on the transport of dangerous goods, that note is only assigned to the test and working pressure columns in table 1. However, the group agreed to retain the note for tables 2 and 3 and to invite the TDG Sub-Committee to consider if there is a need for further consideration of this issue with respect, in particular, to the entries which have no value in the test pressure column in table 2.

**P400**

3.10 As instructed by the Sub-Committee, the group agreed to delete PP31 in P400, taking into account that inner packagings are already required to be hermetically sealed according to P400.

**Presentation of the packing instructions**

3.11 The group noted that the presentation of the packing instructions may in general be improved and requested the Secretariat, when finalizing the consolidated version of draft amendment 36-12 for adoption by MSC 90, to use the presentation of the packing instructions in the published version of the 17th revised edition of the Recommendations on the transport of dangerous goods.

**Use of portable tanks**

3.12 The group noted that the text in the second column in T50 of the entry against UN 1082 indicates an alternative proper shipping name which is not mentioned in the Dangerous Goods List nor in the index. It agreed to keep this entry as it is in T50 and to include "Refrigerant gas R1113" as a synonym in the index. However, noting that this will need to be clarified as other entries for refrigerant gases may also have alternative proper shipping names, the group agreed to invite the TDG Sub-Committee to consider the issue.

**Use of sheeted bulk containers (BK1)**

3.13 As instructed by the Sub-Committee, the group considered the proposal by United Kingdom and France (DSC 16/3/18) and, taking into account the results of the discussions

on this matter at DSC 16, agreed with the proposal and decided to modify chapters 3.2, 3.3, 4.3 and 6.9 accordingly and, in particular, to add a new sub-section 4.3.3 to limit the use of BK1 bulk containers to dangerous goods classified under UN 3077 not meeting the criteria of 2.9.3 of the IMDG Code and transported on short international voyages only. In addition, the group agreed to assign a new special provision 966 to UN 3077 as follows:

"SP 966 Sheeted bulk containers (BK1) are only permitted in accordance with 4.3.3."

### **Transport of flexible bulk containers (BK3)**

3.14 Taking into account the decision of the Sub-Committee, the group considered the proposal by Belgium and the Netherlands (DSC 16/3/15) and decided to include a new sub-section 4.3.4 and a new paragraph 7.3.3.18 to indicate that the transport of BK3 bulk containers in cargo transport units is not allowed for sea transport. The group also agreed to assign a new special provision to all UN numbers to which BK3 is assigned to read:

"SP 967 Flexible bulk containers (BK3) are only permitted in accordance with 4.3.4."

3.15 In addition, the group agreed to insert new sub-sections 7.6.2.12 and 7.7.4.7, taking into account the decision of the Sub-Committee regarding the stack height.

3.16 Finally, the group noted that it would be appropriate for all goods authorized in bulk containers to have a clear link between the dangerous goods list and the additional provisions in 4.3.2. It agreed that there might be a need to have bulk container special provisions as there are portable tank special provisions for the use of portable tanks and invited the TDG Sub-Committee to consider the issue.

### **Marking of cylinders**

3.17 As instructed by the Sub-Committee, the group finalised the text of 5.1.2.2, taking into account the appropriate modifications contained in DSC 16/3/16, and agreed to introduce the following note regarding the transitional period that will apply to the size of the UN number and of the letter "UN" marked on cylinders of 60 litres water capacity or less:

"Note: Cylinders of 60 litres water capacity or less marked with a UN number in accordance with the provisions of the IMDG Code up to 31 December 2013 and which do not conform to the provisions of 5.2.1.1 regarding the size of the UN number and of the letters "UN" applicable as from 1 January 2014 may continue to be used until the next periodic inspection but not later than 1 July 2018."

3.18 Furthermore, some delegations were of the view that a transitional period will also need to be inserted for cylinders of more than 60 litres water capacity. However, the group was of the view that industries concerned should make appropriate proposals on this issue at the UN level at the next session of the TDG Sub-Committee (December 2011) and interested delegations were invited to make proposals at MSC 90 accordingly, as appropriate.

### **Information which supplements the Proper Shipping Name in the documentation**

3.19 When considering 5.4.1.4.3.1, the group agreed to include "or 318" after "special provision 274" to ensure consistency with 3.1.2.8.1 and invited the TDG Sub-Committee to insert the same text in the corresponding paragraph in the Recommendations on the transport of dangerous goods.

**Marine pollutants**

3.20 As instructed by the Sub-Committee, the group considered the proposal by Germany (DSC 16/3/4) and agreed to insert a new sentence in 5.4.1.4.3.5 indicating that the term "MARINE POLLUTANT" may be supplemented with the term "ENVIRONMENTALLY HAZARDOUS" and an appropriate example was provided in 5.4.1.4.4 accordingly.

**Documentation and certification**

3.21 When finalizing the draft text of chapter 5.4, the group noted that the text for the certification in 5.4.1.6.1 and the text in the multimodal dangerous goods form are not consistent and invited the TDG Sub-Committee to consider the issue, taking into account that the use of the words "above" or "below" should be avoided.

**Container/vehicle packing certificate**

3.22 The group also noted that the text in 5.4.2.1.8 did not take into account the provisions of the new 5.5.3 sub-section on special provisions applicable to packages and cargo transport units containing substances presenting a risk of asphyxiation and agreed to amend the text accordingly to read:

"When solid carbon dioxide (CO<sub>2</sub>-dry ice) is used for cooling purposes, the container/vehicle is externally marked in accordance with 5.5.3.6."

3.23 In addition, the group was of the opinion that the amended text should be brought to the attention of the TDG Sub-Committee and to the group of experts in charge of the revision of the IMO/ILO/UNECE Guidelines for packing cargo transport units for appropriate consideration. Furthermore, the group also indicated that the IMO/ILO/UNECE Guidelines for packing cargo transport units should also take into account the draft amendment 36-12 and that a procedure to update the future IMO/ILO/UNECE Code of Practice will need to be drafted in order to keep it consistent with future amendments of the IMDG Code. The group requested the Secretariat to inform the group of experts accordingly.

**Miscellaneous issues related to part 6**

3.24 When finalizing chapter 6.2, the group agreed to insert at the end of the first sentence of 6.2.2.7.7(a) the following words ", as indicated by the distinguishing sign of motor vehicles in international traffic" in order to be consistent with similar paragraphs in the same chapter (e.g. 6.2.2.9.4(a)) and invited the TDG Sub-Committee to include the same text in the corresponding paragraph of the Recommendations on the transport of dangerous goods.

3.25 When finalizing chapter 6.4 and after having considered the IAEA Regulations No.TS-R-1, the group noted that a reference to "6.4.8.4" needed to be inserted after "6.4.7.5" in 6.4.9.1 and in 6.4.23.5 9 (a) of the Recommendations on the transport of dangerous goods and invited the TDG Sub-Committee to consider this issue and to take appropriate action.

3.26 Furthermore, the group noted that in 6.4.23.10 (d) of the Recommendations on the transport of dangerous goods, the example needs to be corrected to read "A/132/B(M)F-96(SP503)" and invited the TDG Sub-Committee to note the view of the group and take action as appropriate.

3.27 When considering the durability of the marking of portable tanks in chapter 6.7, the group was of the opinion that the text is not consistent throughout this chapter as certain information (e.g. information required in 6.7.3.16.2) is required to be durably

marked when other (e.g. information required in 6.7.3.16.1) is not. The group invited the TDG Sub-Committee to further consider the issue and to take appropriate action.

3.28 After having considered chapter 6.7, the group was of the view that there might be a need to revise DSC/Circ.12 on guidance on the continued use of existing IMO type portable tanks and road tank vehicles for the transport of dangerous goods and invited interested delegations to make appropriate proposals for consideration at DSC 17.

3.29 Regarding chapter 6.9 on provisions for the design, construction, inspection and testing of bulk containers, the group agreed to replace "BK2" with "BK(x)\*" in 6.9.4.6 with the following additional footnote: " \*: x should be replaced with "1" or "2" as appropriate". In addition, the group was of the opinion that the corresponding text in chapter 6.8 of the Recommendations on the transport of dangerous goods may benefit from this clarification and decided to bring this addition to the attention of the TDG Sub-Committee.

...

### **SP 965**

3.33 As instructed by the Sub-Committee, the group considered the proposal by CEFIC (DSC 16/3/20) proposing to amend SP 965 and agreed to insert text in SP 965 to allow the transport of UN 2211 and 3314 in cargo transport units which are not ventilated or under temperature control, provided that specific packagings provisions are met. In addition, the group agreed to modify SP 965 to indicate that the warning sign mentioning that the cargo transport unit may contain flammable vapour shall remain on the cargo transport unit until it has been completely ventilated, without it giving any indication of the time it takes to ventilate.

3.34 As requested by the TDG Sub-Committee at its thirty-ninth session, the group invited the Secretariat to bring the new text of special provision SP 965 to the attention of the TDG Sub-Committee. (See annex I to this INF paper)

...

### **Technical names for marine pollutants**

3.36 In the context of the proposal by IPPIC (DSC 16/3/11), the group was of the view that as the proper shipping name is not required to be marked on packages containing dangerous goods in limited quantities, the technical name which supplements the proper shipping name in accordance with SP 274 need not be marked on the packages. To clarify the issue, the group noted that it might be appropriate to insert in SP 274 the words ", when required," after "Proper Shipping Name" in SP 274 and invited the TDG Sub-Committee to consider this proposal and to take appropriate action

...

### **SP 132 and SP 246**

3.41 When finalizing column 16 for UN 2956, 3241 and 3251, the group observed that SP 132 and SP 246 were not required as the text of these special provisions, as amended to take into account the revision of part 7, is already included in column 16. Therefore, the group agreed to delete these special provisions in chapters 3.2 and 3.3. In addition, the Secretariat was requested to inform the TDG Sub-Committee accordingly.

**Appendix B**

3.42 When finalizing Appendix B, the group observed the lack of consistency in the use of lower case and upper case in the first column for certain articles (e.g. the word "Bombs" is in lower case whereas the word "BOOSTERS" is in upper case) and invited the TDG Sub-Committee to consider the issue and take appropriate action.

**4 Consideration of Proposals referred to the E&T Group****Marine pollutant**

4.1 Having considered the proposal by Germany (DSC 16/3/6), the group was of the opinion that it had merit. The improved text of draft new SP 9XX was thus proposed for assignment to UN 3077 and UN 3082, as reflected in proposal 1 in annex 8. The group agreed that more work is needed on the second part of the proposal, as reflected in proposal 2 in annex 8. Consequently, the group invited the DSC Sub-Committee to consider the progress made and to take action as appropriate. (See annex 2 to this INF paper)

**UN 3065**

4.2 The group considered the proposal by China (DSC 16/3/19) and observed that the provision of SP 145 indicates that ALCOHOLIC BEVERAGES are not subject to the provisions of the IMDG Code when transported in receptacles of 250 litres or less. However, the quantity limit for UN 3065 (PG III) is retained in column 7a of the dangerous goods list as SP 145 does not apply to air transport. Therefore, when the transport chain includes both air and maritime transport, shippers may have to transport UN 3065 (PG III) as dangerous goods even when the sea transport is in receptacles of 250 litres or less.

4.3 The group noted that this was not the first time that this issue had been raised. In order to avoid any misinterpretation by the users of the IMDG Code, in particular by competent authorities, the group agreed to invite the TDG Sub-Committee to consider including provisions in the Recommendations on the transport of dangerous goods to solve situations where a consignment is not regulated for a particular mode, but is regulated as dangerous goods when transported by another mode in the transport chain.



## Annex 1

SP965 Replace existing 965 with the following:

### "965

1 When transported in cargo transport units, the cargo transport units shall provide an adequate exchange of air in the unit (e.g. by using a ventilated container, open-top container or container in one door off operation) to prevent the build-up of an explosive atmosphere. Alternatively, these entries shall be transported under temperature control in refrigerated cargo transport units that comply with the provisions of 7.3.7.6. When cargo transport units with venting devices are used, these devices shall be kept clear and operable. When mechanical devices are used for ventilation, they shall be explosion-proof to prevent ignition of flammable vapours from the substances.

2 The provisions of .1 do not apply if:

- a) The substance is packed in hermetically sealed packagings or IBCs, which conform to packing group II performance level for liquid dangerous goods according to the provisions of 6.1 or 6.5, respectively; and
- b) The marked hydraulic test pressure exceeds 1.5 times the total gauge pressure in the packagings or IBCs determined at 55°C for the respective filling goods according to 4.1.1.10.1.

3 Where the substance is loaded in closed cargo transport units, the provisions of 7.3.6.1 shall be met.

4 Cargo transport units shall be marked with a warning mark including the words "CAUTION – MAY CONTAIN FLAMMABLE VAPOUR" with lettering not less than 25 mm high. This mark shall be affixed at each access point in a location where it will be easily seen by persons prior to opening or entering the cargo transport unit and shall remain on the cargo transport unit until the following provisions are met:

- a) The cargo transport unit has been completely ventilated to remove any hazardous concentration of vapour or gas;
- b) The immediate vicinity of the cargo transport unit there is clear of any source of ignition; and
- c) The goods have been unloaded."

## **Annex 2**

### **Consideration of DSC 16/3/6**

#### **Document submitted by Germany**

#### **Proposal 1**

It is proposed to assign the following SP 9XX to UN 3077 and 3082:

"SP 9XX: Substances classified in accordance to 2.9.3 are subject to the provisions for marine pollutants. Substances which are transported under UN 3077 and 3082 but which do not meet the criteria of 2.9.3 (see 2.9.2.2) are not subject to the provisions for marine pollutants. However for substances that are identified as marine pollutants in this Code (see Index) but which no longer meet the criteria of 2.9.3, the provisions of 2.10.2.6 apply."

#### **Proposal 2**

It is proposed to amend 2.10.2.4 and 3.2.1 of the IMDG Code as follows:

"2.10.2.4 Column 4 of the Dangerous Goods List also provides information on marine pollutants using the symbol **P** for single entries. The information "-" in that column does not exclude the application of the classification criteria in 2.10.3."

In 3.2.1, the following sentence is added at the end of column 4: "The information "-" does not exclude the application of the classification criteria in 2.10.3."

---